

TEWO

RAW SEQUENCE LISTING DATE: 08/18/2004
PATENT APPLICATION: US/10/791,860 TIME: 09:08:21

Input Set : A:\2004-08-12 0641-0260P.ST25.txt
Output Set: N:\CRF4\08182004\J791860.raw

3 <110 > APPLICANT: Bing-Ren HUANG et al. 5 <120> TITLE OF INVENTION: REGULATOR OF APOPTOSIS AND CELL PROLIFERATION 7 <130> FILE REFERENCE: 0641-0260P 9 <140> CURRENT APPLICATION NUMBER: US 10/791,860 10 <141> CURRENT FILING DATE: 2004-03-04 12 <160> NUMBER OF SEO ID NOS: 20 14 <170> SOFTWARE: PatentIn version 3.2 16 <210> SEQ ID NO: 1 17 <211> LENGTH: 197 18 <212> TYPE: DNA 19 <213> ORGANISM: Rattus norvegicus 21 <400> SEQUENCE: 1 22 gggacaaaac tttataacta caagcactta agcctcaaaa ttcttgactt tttctttaat 60 24 gactatagta taaccctcag ttggtcacat gtctacacat tatttccagt tgataacaag 120 26 tageggtgtt ttccatatgt aatteagate tgaacttaat ggcaataaat ggtttaaata 180 28 tttgcgaaaa aaaaaaa 197 31 <210> SEQ ID NO: 2 32 <211> LENGTH: 167 33 <212> TYPE: DNA 34 <213> ORGANISM: Rattus norvegicus 36 <400> SEQUENCE: 2 37 caggtcacgg aagccagtca tgccggagac accggcttct gggaagccgc ccaggtctca 39 ttcctccctg ctgtttggag gcagcatctc ctctttttat ggagggcccq tcctttttc 120 41 ttacaaattc ttcaataaag acacattctt gaggcgaaaa aaaaaaa 167 44 <210> SEO ID NO: 3 45 <211> LENGTH: 901 46 <212> TYPE: DNA 47 <213> ORGANISM: Rattus norvegicus 49 <400> SEQUENCE: 3 50 gctggccggg tcgaccctgg tgtcatccgt ttaggaagcg gcttcaccgc caacagcacg 60 52 gccatggctg gagctctggt gcgcaaagca gcggactatg tccggagcaa ggacttccgg 120 54 gactatetea tgagtaegea ettetgggge eeagttgeea aetggggtet eeceattget 180 56 gctatcaatg acatgaagaa atctccagag attatcagtg ggcggatgac tttcgccctc 240 58 tgttgctatt ctctgacatt catgagattt gcctacaagg tacaaccccg aaactggctt 300 360 62 aactacgaga tgagtaagcg gccatctgcc tagcagtgca aggaccagct cttgaaaggg 420 64 acagtgetee agecactgtt geggeeacag ateaegteag catgaatagt egtgetgagg 480 66 ggaaaacacg gaagactatc tttaatgacc atgccaacat tattgaatag ccaagaatcc 540 68 ccaaaccaac teteggetge ettateaatg etaaacttta tttgtettea teaggagtag 600 70 ttcaaaatat gcagctaatt taataatttt gaatgatgtt atctatagca atctgtagta 660 72 atatgtatat tatctattgg gatttgtgta ataaaaaatc taagggaaca aaactttata 720 74 actacaagca cttaagtcct caaaattctt gactttttct ttaatgacta tagtataacc 780 76 ctcagttggt cacatgtcta cacataattt ccagtgataa caagtagegg tgttttccat 840

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78 atgtaattca gatctgaact taatggcaat aaatggttta aatatttgcg aaaaaaaaa
                                                                         900
80 a
                                                                          901
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84 <211> LENGTH: 109
85 <212> TYPE: PRT
86 <213> ORGANISM: Rattus norvegicus
88 <400> SEQUENCE: 4
90 Met Ala Gly Ala Leu Val Arg Lys Ala Ala Asp Tyr Val Arg Ser Lys
                                        10
94 Asp Phe Arg Asp Tyr Leu Met Ser Thr His Phe Trp Gly Pro Val Ala
               20
                                    25
98 Asn Trp Gly Leu Pro Ile Ala Ala Ile Asn Asp Met Lys Lys Ser Pro
                               40
102 Glu Ile Ile Ser Gly Arg Met Thr Phe Ala Leu Cys Cys Tyr Ser Leu
106 Thr Phe Met Arg Phe Ala Tyr Lys Val Gln Pro Arg Asn Trp Leu Leu
107 65
                                             75
110 Phe Ala Cys His Val Thr Asn Glu Val Ala Gln Leu Ile Gln Gly Gly
                    85
114 Arg Leu Ile Asn Tyr Glu Met Ser Lys Arg Pro Ser Ala
                1.00
118 <210> SEQ ID NO: 5
119 <211> LENGTH: 109
120 <212> TYPE: PRT
121 <213> ORGANISM: Mus musculus
123 <400> SEQUENCE: 5
125 Met Ala Gly Ala Leu Val Arg Lys Ala Ala Asp Tyr Val Arg Ser Lys
                                        10
129 Asp Phe Arg Asp Tyr Leu Met Ser Thr His Phe Trp Gly Pro Val Ala
                20
133 Asn Trp Gly Leu Pro Ile Ala Ala Ile Asn Asp Met Lys Lys Ser Pro
            35
                                40
137 Glu Ile Ile Ser Gly Arg Met Thr Phe Ala Leu Cys Cys Tyr Ser Gln
                            55
141 Thr Phe Met Arg Phe Ala Tyr Lys Val Gln Pro Arg Asn Trp Leu Leu
                        70
145 Phe Ala Cys His Val Thr Asn Glu Val Ala Gln Leu Ile Gln Gly Gly
                    85
149 Arg Leu Ile Asn Tyr Glu Met Ser Lys Arg Pro Ser Ala
               100
                                    105
153 <210> SEQ ID NO: 6
154 <211> LENGTH: 102
155 <212> TYPE: PRT
156 <213> ORGANISM: Homo sapiens
158 <400> SEQUENCE: 6
160 Met Ala Gly Ala Leu Val Arg Lys Ala Ala Asp Tyr Val Arg Ser Lys
161 1
                    5
164 Asp Phe Arg Asp Tyr Leu Met Ser Thr His Phe Trp Gly Pro Val Ala
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                                    25
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168 Asn Trp Gly Leu Pro Ile Ala Ala Ile Asn Asp Met Lys Lys Ser Pro
169
             35
172 Glu Ile Ile Ser Gly Arg Met Thr Phe Ala Leu Cys Cys Tyr Ser Leu
173
                             55
176 Thr Phe Met Arg Phe Ala Tyr Lys Val Gln Pro Arg Asn Trp Leu Leu
177 65
                         70
                                             75
180 Phe Ala Cys His Ala Thr Asn Glu Val Ala Gln Leu Ile Gln Gly Gly
                     85
                                         90
184 Arg Leu Ile Lys His Glu
185
                100
188 <210> SEQ ID NO: 7
189 <211> LENGTH: 988
190 <212> TYPE: DNA
191 <213> ORGANISM: Homo sapiens
193 <400> SEQUENCE: 7
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                                                                            60
196 cattggctct gggaagcggc agcagaggca gggaccactc ggggtctggt gtcggcacag
                                                                           120
198 ccatggcggg cgcgttggtg cggaaagcgg cggactatgt ccgaagcaag gatttccggg
                                                                           180
200 actacctcat gagtacgcac ttctggggcc cagtagccaa ctggggtctt cccattgctg
                                                                           240
202 ccatcaatga tatgaaaaag tctccagaga ttatcagtgg gcggatgaca tttgccctct
                                                                           300
204 gttgctattc tttgacattc atgagatttg cctacaaggt acagcctcgg aactggcttc
                                                                           360
206 tgtttgcatg ccacgcaaca aatgaagtag cccagctcat ccagggaggg cggcttatca
                                                                           420
208 aacacgagat gactaaaacg gcatctgcat aacaatggga aaaggaagaa caaggtcttg
                                                                          480
210 aagggacagc attgccagct gctgctgagt cacagatttc attataaata qcctccctaa
                                                                          540
212 ggaaaataca ctgaatgcta tttttactaa ccattctatt tttatagaaa tagctgagaq
                                                                          600
214 tttctaaacc aactctctgc tgccttacaa gtattaaata ttttacttct ttccataaag
                                                                          660
216 agtagctcaa aatatgcaat taatttaata atttctgatg atgttttatc tgcagtaata
                                                                          720
218 tgtatatcat ctattagaat ttacttaatg aaaaactgaa gaqaacaaaa tttgtaacca
                                                                          780
220 ctagcactta agtactcctg attcttaaca ttgtctttaa tgaccacaag acaaccaaca
                                                                          840
222 gctggccacg tacttaaaat tttgtcccca ctgtttaaaa atgttacctg tgtatttcca
                                                                          900
224 tgcagtgtat atattgagat gctgtaactt aatggcaata aatgatttaa atatttgtta
                                                                          960
226 aaaaaaaaa aaaaaaaaa aaaaaaaa
                                                                          988
229 <210> SEO ID NO: 8
230 <211> LENGTH: 873
231 <212> TYPE: DNA
232 <213> ORGANISM: Mus musculus
234 <400> SEQUENCE: 8
235 ggtgtcatct gtctaggtag cggcttcacc gccaacggca cggccatggc tggagcgctg
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237 gtgcgcaaag cggcggacta tgtccggagc aaggacttcc gggactatct catgagtacg
                                                                          120
239 cacttetggg geceagttge caactggggt etececattg etgetateaa tgacatgaag
                                                                          180
241 aaateteeag agattateag tgggeggatg aetttegeee tetgttgeta ttetetgaea
                                                                          240
243 ttcatgagat ttgcctacaa ggtacaacct cgaaactggc ttttgtttgc atgccatgta
                                                                          300
245 acaaacgaag tagctcagct cattcaggga ggacgactta tcaactacga gatgagtaag
                                                                          360
247 eggecatetg catageggta caaggaceag etettgaaag agacagtget eeagceactg
                                                                          420
249 ctgcagccac agatcatgtc agcatgagta gtcgtgctga agggaaaaca cagaatgcta
                                                                          480
251 tottaatgac catgocaaca ttattgaata googagagto cotaaaccca otototgotg
                                                                          540
253 ccttatcaat gctaaacctt atttgtcttc atcaagagta gttcaaaata tgcaactaat
                                                                          600
255 ttaataattt tgaatgatgg ttttatctat agcaatctgt agtaatatgt atattatcta
                                                                          660
257 ttgggatttg tgtaataaaa aatctaaggg aacaaaattt tataactaca agcacttaag
                                                                          720
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261 263 266	tactcaaaat tettgaettt ttetttaatg acaatagtaa acceteagtt ggteacatgt etacacataa tttecagtga taacaagtat eggtgtttte catatgtaac teagatetgt aacttaatgg caataaatgg tttaaatatt tge <210> SEQ ID NO: 9	780 840 873
	<211> LENGIH: 549 <212> TYPE: DNA	
	<213> ORGANISM: Mus musculus	
	<400> SEQUENCE: 9	
272	cggcacagec atggcgggcg cgttggtgcg gaaaqcggcg gactatgtcc gaagcaagga	60
274	tttccgggac tacctcatga gtacqcactt ctqqqqccca gtaqccaact ggggtcttcc	120
276	cattgctgcc atcaatgata tgaaaaagtc tccaqaqatt atcagtgggc ggatgacatt	180
278	tgeeetetgt tgetattett tgacatteat gagatttgee tacaaggtae ageeteggaa	240
280	ctggcttctg tttgcatgcc acgcaacaaa tgaaqtaqcc cagctcatcc agggagggg	300
282	gettateaaa eaegagatga etgtaaetta atggeaataa atgatttaaa tatttgaaga	360
284	gtagctcaaa atatgcaatt aatttaataa tttatctgca gtaatatgta tatcatctat	420
286	tagaatttac ttaatgaaaa actgaagaga acaaaatttg taaccactag cacttaagta	480
200	ctcctgattc ttaacattgt ctttaatgac aatagctgag agtttctaaa ccaactctct	540
	<pre><210> SEQ ID NO: 10</pre>	549
	<211> LENGTH: 10	
	<212> TYPE: DNA	
	<213> ORGANISM: Artificial Sequence	
298	<220> FEATURE:	
	<223> OTHER INFORMATION: 5' random arbitrary primer	
	<400> SEQUENCE: 10	
	caagcgaggt	10
	<210> SEQ ID NO: 11	
	<211> LENGTH: 10	
	<212> TYPE: DNA	
	<213> ORGANISM: Artificial Sequence	
	<220> FEATURE:	
	<223> OTHER INFORMATION: 5' random arbitrary primer <400> SEQUENCE: 11	
	cagtgagetg	1.0
	<210> SEQ ID NO: 12	10
	<211> LENGTH: 10	
319	<212> TYPE: DNA	
320	<213> ORGANISM: Artificial Sequence	
322	<220> FEATURE:	
323	<223> OTHER INFORMATION: 5' random arbitrary primer	
	<400> SEQUENCE: 12	
	gtcacggaag	10
	<210> SEQ ID NO: 13	
	<211> LENGTH: 27	
	<212> TYPE: DNA	
324	<213> ORGANISM: Artificial Sequence <220> FEATURE:	
	<223> OTHER INFORMATION: PCR primer AP1	
337	<400> SEQUENCE: 13	
	~ · · · · · · · · · · · · · · · · · · ·	

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```
338 ccatcctaat acgactcact atagggc
                                                                             27
 341 <210> SEQ ID NO: 14
 342 <211> LENGTH: 24
 343 <212> TYPE: DNA
 344 <213> ORGANISM: Artificial Sequence
 346 <220> FEATURE:
 347 <223> OTHER INFORMATION: PCR primer corresponding to SEQ ID NO: 1
 349 <400> SEQUENCE: 14
 350 agccgagagt tggtttgggg attc
                                                                             24
 353 <210> SEQ ID NO: 15
 354 <211> LENGTH: 22
 355 <212> TYPE: DNA
 356 <213> ORGANISM: Artificial Sequence
 358 <220> FEATURE:
 359 <223> OTHER INFORMATION: Primer I (ARBP cDNA 5' primer)
 361 <400> SEQUENCE: 15
 362 gggatccaac agcacggcca tg
                                                                             22
365 <210> SEQ ID NO: 16
366 <211> LENGTH: 26
367 <212> TYPE: DNA
368 <213> ORGANISM: Artificial Sequence
370 <220> FEATURE:
371 <223> OTHER INFORMATION: primer II (ARBP cDNA 3' primer )
373 <400> SEQUENCE: 16
374 ggaattcatt gataaggcag ccgaga
                                                                             26
377 <210> SEQ ID NO: 17
378 <211> LENGTH: 20
379 <212> TYPE: DNA
380 <213> ORGANISM: Artificial Sequence
382 <220> FEATURE:
383 <223> OTHER INFORMATION: GAPDH sense primer
385 <400> SEQUENCE: 17
386 tgctggtgct gagtatgtcg
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389 <210> SEQ ID NO: 18
390 <211> LENGTH: 20
391 <212> TYPE: DNA
392 <213> ORGANISM: Artificial Sequence
394 <220> FEATURE:
395 <223> OTHER INFORMATION: GAPDH anti-sense primer
397 <400> SEQUENCE: 18
398 gcatgtcaga tccacaacgg
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401 <210> SEO ID NO: 19
402 <211> LENGTH: 14
403 <212> TYPE: PRT
404 <213> ORGANISM: Artificial Sequence
406 <220> FEATURE:
407 <223> OTHER INFORMATION: polyclonal antibody against a C-terminal peptide sequence of
409 <400> SEQUENCE: 19
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ARBP

VERIFICATION SUMMARY

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